

Having described the invention, the following is claimed:

1. A component for use in manufacturing articles, such as printed circuit boards, comprising: a laminate constructed of a sheet of copper foil that, in a finished printed circuit board, constitutes a functional element and a sheet of carbon steel having a layer of an inert metal thereon, said sheet of carbon steel constituting a discardable element, one surface of the copper sheet and the surface of the inert metal layer on the carbon steel sheet being essentially uncontaminated and engageable with each other at interfaces, said copper sheet being attached to the inert metal layer of the carbon steel sheet at its borders and defining a substantially uncontaminated central zones inwardly of the edges of the sheets and unjoined at the interfaces.

2. A component as defined in claim 1, wherein said inert metal is selected from the group consisting of nickel, copper, cobalt, brass, chromium, antimony and combination thereof.

3. A component as defined in claim 2, wherein said inert metal is chromium.

4. A component as defined in claim 3, wherein said chromium layer has a thickness of about 0.1 gram/m^2 to about 10 grams/m^2 .

5. A component as defined in claim 4, wherein said chromium layer has a thickness of about 2.0 grams/m^2 to about 4 grams/m^2 .

6. A component as defined in claim 3, wherein said chromium is electrolytically deposited on said carbon steel sheet.

7. A component as defined in claim 3, wherein said chromium is vapor deposited on said carbon steel sheet.

8. A component as defined in claim 1, wherein said carbon steel sheet has a thickness of about 0.05 mm to about 2.0 mm.

9. A component as defined in claim 4, wherein said carbon steel sheet has a thickness of about 0.1 mm to about 0.3 mm.

10. A component as defined in claim 1, wherein said copper sheet is attached to said inert metal layer by an adhesive along edges of said copper sheet and metal layer of said carbon steel sheet.

11. A protected sheet of copper foil for manufacturing multi-layer laminate, comprising:

(a) a sheet of copper foil having a thickness greater than about 5 μm and having a first surface adapted for adhering to fiber reinforced polymer layer and a second surface to be exposed after said first surface is adhered to said fiber reinforced polymer layer;

(b) a protective sheet of carbon steel having a thickness of about 0.05 mm to about 2.0 mm, said carbon steel sheet having a layer of chromium of about 0.1 gram/m² to about 10 grams/m² electrodeposited thereon, said layer of chromium covering said second surface of said copper sheet and being attached thereto in a manner defining substantially uncontaminated central zones.

~~12.~~ ¹⁰ A sheet as defined in claim ~~11~~⁹, wherein said copper sheet is attached to said carbon steel sheet along said layer of chromium by adhesive along edges of said sheets.

